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Bulletin - April, 1990

Civil Aviation Medical Association

BULLETIN
OF THE
CAMA CIVIL AVIATION MEDICAL ASSOCIATION

Headquarters
775 Bank Lane — Room 211
Lake Forest, Illinois 60045
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APRIL, 1990

President's Message

By Stanley J. Kirk, M.D.

We have just mailed a membership letter to over six thousand aviation medical examiners. We hope this will result in a substantial number of new members, for if CAMA is to be of any influence in Civil Aviation Medicine, it must become a larger organization.

This is not a one-person job; it is really the responsibility of every member. So I want to discuss briefly how you can help CAMA to grow, in size, in professional stature, and in the influence we exert on other groups.

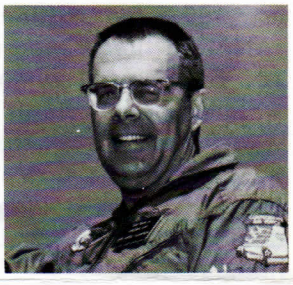
First, please pay your dues. Second, attend whatever meetings you can, be it the interim meeting when we meet with the Aerospace Medical Association, or at our own annual meeting which this year will be held in San Diego, October 10-14.

Talk to other AME's about us. Tell them who we are and what we do, and why we think belonging to CAMA is extremely important.

Be a perpetual recruiter. Ask Headquarters to send you a supply of our printed material to distribute to non-members. Ask them to join. If you are sincerely interested, ask to be put on one of our committees. You'll find a list in the January Bulletin.

If you have any complaints, write to us about them. Send your suggestions or ideas to me, your President, or to CAMA Headquarters. As a favor to me, please become a more active member of this fine organization.

EDITORIAL



Robert L. Wick, Jr., M.D.

"Marry sir, . . . it promotes the desire but it takes away the performance."

That's what the Bard of Avon said about alcohol. While it was meant in a somewhat different context, the decreased performance of anyone operating a vehicle under the influence of alcohol, be it a plane, train, or truck is of concern to all. It is long past time for our federal government to address the problem. Far too often, our courts have been lenient with someone charged with driving under the influence only to have a tragedy a short time later when the same individual killed someone in a subsequent drunken driving episode.

Any approach to this problem must be based on a thorough understanding of alcohol abuse and dependence. The current DOT/FAA drug program is marked with a multitude of errors - errors which could have been prevented had experts been consulted prior to issuing the rules. Late last year, the National Institute on Drug Abuse (NIDA) convened a consensus conference about transportation and drug abuse. This conference resulted in an outstanding series of recommendations from the more than 70 national experts in attendance. Had these recommendations been asked for and considered before the rules were issued, we would have had a far better program today.

The National Institute on Alcoholism and Alcohol Abuse (NIAAA) is now in a position to take the lead and convene a similar conference. Such a gathering of experts should be able to produce a consensus plan to avoid the mistakes of the current drug testing program.

Let's get with it and listen to the real experts.

Department Of Transportation Proposes Alcohol Testing

The DOT is now reviewing public comments about alcohol abuse prevention in the transportation industry. These comments were made in response to an Advanced Notice of Proposed Rule Making (ANPRM) first issued in November of last year. (An ANPRM is used when the government is not clear what it wants to do or what it should do, but instead wants advice from the general public about a particular problem. It is usually followed by a Notice of Proposed Rule Making (NPRM) which spells out the details of the rule which the government intends to implement.)

This particular ANPRM asked the four following questions:

1. *"Are additional measures necessary to control alcohol abuse among transportation workers?"*
2. *"What should be prohibited?"*
3. *"If further action is necessary, what general forms should it take?"*
4. *"What should be the consequences for an employee identified as using alcohol on the job, being under the influence on the job, or improperly using alcohol prior to work?"*

Implicit within these four questions are a whole host of subordinate problems which make the entire matter extremely complicated. We'll take the questions one at a time, and point out some of the problems.

First and perhaps most important of all, the entire proposal rests on the assumption that alcohol consumption represents a major problem among the transportation industries. There is no reason to believe that alcohol abuse occurs less often in transportation businesses than elsewhere. On the other hand, there is no evidence that the problem is any larger either. Nor is there any evidence that thorough enforcement of present rules and regulations would not satisfactorily control the problem as it exists today.

The question of what should be prohibited is not as simple as it might seem. Alcohol is a legal beverage. It is not analogous to illicitly used drugs. Eighty five percent of adults use beverage alcohol to some degree, and for that reason, we simply cannot prohibit it as we do marijuana, LSD, heroin, and so on. Related to this question is that of what constitutes being under the influence of alcohol. Most state laws specify that a blood alcohol value of 100 mgm% is *prima facie* evidence of intoxication for driving purposes. The same value is frequently applied to recreation boaters. Ample evidence can be found in the literature that this is an extremely high level, and almost everyone at this level will clearly appear to be under the influence of alcohol.

Several transportation modes have used the value of 40 mgm% based on the in-flight research of Dr. Charles Billings and your Bulletin editor. This represents a misinterpretation of the data and the conclusions. A level of 40 mgm% was the lowest used during this project, and the subject pilots were shown to be adversely affected at this value. The research did not conclude that levels lower than this were safe. On the contrary, the conclusion was that alcohol effects appeared to be part of a continuous spectrum, and that values lower were very likely also to show performance decrements. (Dr. Billings, now with the National Aeronautics and Space Administration, has since shown significant performance decrements in simulators at 25 mgm% - a blood alcohol level commonly found after two drinks or two beers.)

The question is, what is a significant level? Should it be the current 100 mgm%, 40 mgm%, or 25 mgm%, or simply 0 mgm%? (Most good laboratory equipment is easily capable of measuring blood alcohol levels down to at least 10 mgm%.) Or should one use some sort of time limit?

Current FAA rules have for years prohibited any alcohol consumption within 8 hours of flight. This works fairly well, but because the body metabolizes the alcohol in each drink or each beer in about an hour, it can be "overkill." That is, following two drinks, it is probably safe to fly in two hours or so, and so on. Conversely, for someone with a high alcohol level - say 150 mgm% - eight hours is not enough. That individual will require ten hours or more before the alcohol level is zero. (Then there is the question of whether he or she will really feel well enough to fly at that time even if the blood alcohol level is back to nothing.)

The third question; i.e. what further action is necessary, is probably the most vexing of all. There are those who believe that the same procedures mandated for the urine drug testing program - pre-employment testing, periodic testing, random testing, post accident testing, for cause testing, and drug recovery program monitoring - will be effective. To these the DOT has added a new category - pre-performance testing. Under this rubric, an individual would have to pass some sort of test showing he or she to be alcohol-free before beginning work.

The other major approach considered is that of education. While this has some merit, alcohol abuse, and particularly alcohol dependence, is notorious as a disease of denial. The individual with a serious problem rationalizes what every one else knows. Typical statements are, "I haven't done that . . ." "I'm not that bad . . ." "I can quit any time I want to . . ." "I can handle it . . ." and so on. For that reason, the real value of education probably lies in the fact that those around the alcohol dependent individual will realize and understand what is actually happening.

The last question about the consequences is of critical importance. Should our government mandate penalties, particularly where someone is working at a critical job at the time? Or should these be handled by private industry as they manage other employee rule infractions? Should there be a combination as there is for our highways; e.g. Driving While Intoxicated (DWI) is against the law, but one can be intoxicated at the office without running afoul of the gendarmes? In other words, there is no question that a pilot should not be under the influence of alcohol while flying. Strong penalties certainly are appropriate under these circumstances. However, does this also include the same pilot when he is in a company office bringing his charts up to date and is not otherwise scheduled to fly?

Alcohol testing itself is central to this proposal. Almost all good research data present alcohol in terms of blood levels. Blood alcohol levels are basically determined either by actually taking a blood sample or by using some sort of breath testing device. Because alcohol crosses mucous membranes easily and quickly, the alcohol concentration in an end tidal alveolar air sample is very closely correlated with actual blood levels. This is the principle on which various types of Breathalyzers work. However, these do require trained operators and good calibration before use. They do not lend themselves to use by untrained supervisors or other laymen.

Blood alcohol determinations require a venepuncture. Many people object to the discomfort involved, and others become ill or even faint during a phlebotomy. Obviously this will present a problem if a flight crew is subjected to such testing immediately prior to a scheduled departure. Moreover, the results are not available until after the sample has been analyzed in the laboratory. Pre-performance testing will probably be precluded with a concomitant loss of accuracy.

Urine can be tested for alcohol, but the relation to a blood alcohol level is not absolute. In general, a urine level will be up to 50% higher than the level found in the blood. Such a test cannot be used for pre-performance testing for the same reasons that an actual blood test is not practical. In addition, the inexact relation to blood levels further compounds the problem.

There are a number of commercial screening tests available for use at work or in the field, but there are questions of accuracy and relevance for each. They depend upon color changes when exposed to saliva, breath, or urine. Most are fairly sensitive and specific, but they are certainly not definitive for alcohol levels. They are not good enough for decisions about discipline or grounding of a flight crew. In other words, there will be too many "false positives" with typical screening devices.

The recent widely publicized incident in which three pilots for a major airline flew while allegedly under the influence of alcohol will doubtless add fuel to the fire about alcohol use in aviation. Public and political pressure will be such that the DOT cannot simply ignore the problem. But the question of exactly what format the DOT reaction may take is quite up in the air.

CAMA will keep close tabs on the situation. Watch these pages for the latest developments about alcohol use and alcohol testing in aviation. Most important of all, be sure and make your views known to your CAMA officers so that CAMA can accurately represent you as in the upcoming deliberations.

Call For Papers

Chairman of the scientific program for CAMA's 25th Annual Meeting, Dr. Stephen V. Blizzard, again issues a Call for Papers, and appeals particularly to CAMA members. Theme of the meeting will be, "Aviation Medical Practice in the Next Decade." Papers should be 20 minutes long, with 5 to 10 minutes for questions.

Please submit a 200 word abstract by May 15, 1990. Send it to:

Stephen V. Blizzard, M.D.

378 Viewmount Drive ● Nepean, Ontario K2E 7P6 ● Canada

CAMA 25th Annual Meeting San Diego, California

The 25th Annual Meeting of the Civil Aviation Medical Association will be held **October 10-14, 1990** at the Doubletree Hotel, San Diego, California. PLAN NOW TO COME!!! One of CAMA's most successful meetings was held in San Diego in 1976 and we hope to outdo that one.

This old and beautiful city has a mild climate - sunny, dry and almost always warm. It is the home of the world famous San Diego Zoo, the San Diego Wild Animal Park, the Sea World Marine Zoological Park, many museums, excellent restaurants, and super shopping.

You can experience the sights and sounds of Mexico in the Old Town section of San Diego or you can take the short trip into Mexico itself and visit nearby Tijuana.

San Diego has many wonderful beaches which provide the opportunity for fishing, boating, swimming or just enjoying the beauty of the whole waterfront.

The *Mission Valley Doubletree Hotel* is easily reached by freeway, and both Lindbergh Field Airport and the downtown area are just 10 minutes away. It is in an ideal location for sightseeing and shopping. The hotel is new and we're sure you will find it both attractive and comfortable. The special room rate for our meeting is a reasonable $75.00.

CAMA Potpourri

FAA BEGINS SERIOUS REVIEW OF MEDICAL STANDARDS

Several years ago, the FAA contracted with the American Medical Association to review the current medical standards. That study has languished in FAA headquarters since it was completed. Continued pressure from a number of aviation groups and the Congress has required the Office of Aviation Medicine to dust it off and begin a serious study of the contents. While the AMA recommendations are not likely to be adopted *in toto* they will serve as a foundation for the first complete medical standards overhaul since the late 1950's.

Look for changes in the cardiovascular standards, the visual acuity requirements, and color vision standards to name just a few of the areas due for major changes. We should be seeing the first proposed revisions late this year.

FAA TO RESCIND DESIGNATION OF AME'S WHO MAKE MISTAKES

The Federal Air Surgeon is concerned about the error rate found with medical applications arriving in Oklahoma City. At present, it is running about 40%; i.e. almost half of all the applications submitted on behalf of airmen have mistakes of some sort or other in them. Many are minor clerical faults, but up to 20% may be significant professional errors. All require clerical time to correct, and the most serious can require an emergency revocation of the certificate. This is a safety hazard for flight at most, and at least, causes considerable legal expense to the government. Look for the FAA to crack down on AME's who are careless and making errors. In some cases, the offending physician may lose his or her FAA designation.

There is one thing which may help. The FAA now offers a very brief course for office assistants in conjunction with the AME seminar program. The primary focus is on how to fill out the Form 8500 without mishaps. Send your gal Friday. She'll enjoy it. Your error rate will drop. FAA clerical expenses will decrease, and everyone will win.

RESULTS OF DRUG TESTING: FEW FINDINGS

The results to date of airline industry random drug testing are minimal at best. While the first summary report is not due until after the first half of the year, an informal survey of a number of major airlines shows few drug users have been found. One major carrier which has completed several thousand tests found one mechanic positive for cocaine under the random testing program. Another carrier has no positives at all. A third found one Captain with cocaine in his urine.

At publication time, about half of all airline captains and 25% of all copilots have been through their periodic tests. One international carrier has had one positive test with a pilot. Surprising to all has been the paucity of positives among flight attendants, a group previously thought to have drug users among their ranks.

One way to view the program - the airlines are required by the federal government to spend up to $100,000 per "joint" or per "line."

Of Interest

To Members . . .

AVIATION MEDICAL MEETINGS OF INTEREST

FAA Aviation Medical Examiners Seminars for 1990

Date	City
May 14-17	New Orleans, LA
June 21-24	St Paul, MN
July 12-15	San Francisco, CA
Aug. 2-5	Orlando, FL
Aug. 23-26	Kansas City, MO
Sept. 20-24	Seattle, WA
Oct. 4-7	Anchorage, AK
Oct. 22-26	Okla. City, OK
Nov. 8-11	Dayton, OH
Nov. 29 - Dec. 2	Norfolk, VA

For further information,
contact your regional flight surgeon or:
Mr. James L. Harris
FAA Civil Aeromedical Institute
P.O. Box 25082 • Oklahoma City, OK 73125
(405) 680-4881

The Aerospace Medical Association May 13-17, 1990
New Orleans Marriott Hotel
New Orleans, LA

For information contact:
R.R. Hessberg, M.D. Executive Vice President
320 S. Henry St. • Alexandria, VA 22314-3524
(703) 739-2240

The Flying Physicians Association
August 5-10, 1990
Hotel Vancouver
Vancouver, B.C. Canada

For further information contact:
Mr. Don Drake, Executive Vice President
Flying Physicians Association
P.O. Box 17841 • Kansas City, MO 64134
(816) 763-9336

The 38th Congress of Aviation and Space Medicine
September 10-13, 1990
Hotel Meridien, Montparnasse
Paris, France

For further information contact:
38th International Congress
AIR France Medical Service
1 Square Max Hymans
75757 Paris Cedex 15
France

Welcome Aboard!

We welcome the following new members into the fellowship of CAMA.

James R. Nolan, M.D.
Box 781
Winnipeg, Manitoba R3C 2N4
Canada

David P. Millett, M.D.
7410 SW. 159 Terrace
Miami, FL 33157

Dr. Ana Ruth Albrecht
5870 Braemar Ave.
Burnby, B.C. V5E 3L5
Canada

Mei-Fun Seto, M.D.
12225 - 39th St.
Edmonton, Alberta T5W 2K2
Canada

Dr. John E. Albrecht
306 Braid St.
New Westminster, B.C. V3L 3R1
Canada

One Man's Family

John and Myrtle Boyd of Eden, Texas will see grandson Philip R. Boyd graduate from the United States Military Academy on May 31. Philip's father John H. Boyd III graduated from USMA in the class of 1966. The Boyd's will leave immediately after the West Point ceremony to fly back to Ft. Worth to see son Alan R. Boyd graduate from Texas College of Osteopathic Medicine on June 2.

USSR Visit

Early this month Dr. Stephen V. Blizzard joined a delegation of aerospace medicine specialists invited by the USSR Academy of Sciences to visit the Soviet Union. This group of physicians will spend two weeks visiting aerospace medicine centers, universities, and facilities for research development, and training operations. Object of the tour is to enable us to get to know the Soviet medical and research personnel and to learn which of their problems are similar and which are different from ours. Steve has promised us a report when he returns.

Dr. Robert S. Poole To Speak At New Orleans Meeting

Every year it is the custom to hold an interim Board of Trustees Meeting during the annual convention of the Aerospace Medical Association. This year the Board of Trustees will meet on Monday, May 14, 1990 in Mardi Gras Rooms A and B of the Marriott Hotel at 8:00 a.m. This is an open meeting which all CAMA members may attend. The CAMA luncheon will be held on the same day at 12:00 noon and in the same room. Dr. Robert S. Poole, Area Medical Director of American Airlines will be the speaker. His topic will be "Challenges Facing Aviation Medical Examiners". It is expected that Aviation Medical Examiners from many nations will attend.

U.S. Department of Transportation

FAA Proposes New Rules For Drug Enforcement Assistance

The Federal Aviation Administration (FAA), in an effort to help stem the flow of drugs into this country, has proposed new requirements for the registration of aircraft and the certification of pilots as well as new procedures pertaining to fuel system modifications.

The proposed actions, which are in response to the Federal Aviation Drug Enforcement Assistance Act of 1988, are aimed at discouraging the use of private (general aviation) aircraft in drug smuggling.

The agency said that law enforcement records show that in 1988, half of the illegal drugs seized were brought into this country by small private aircraft.

The FAA proposes to change the requirements for aircraft registration to discourage registration under a false name and operation of aircraft without actually intending to register the aircraft.

The new procedures would require each applicant to furnish a number of positive identification documents, such as a driver's license number for an individual or a tax identification number for business. A residential or business address must also be provided.

Each application would have to contain a certificate of True Copy/Identification verified by either an FAA official or a notary public.

The proposal also establishes expiration dates for aircraft registration certificates and sets up a timely system for tracking transfers of ownership. The procedures for issuance of registration numbers and special markings will be clarified and amended.

Requirements for the issuance of pilot certificates will be changed to ensure positive identification at the time of application. Acceptable types of identification will include driver licenses, government ID cards, passports, and certain other forms of ID.

The pilot certificate itself would have to be renewed every three years.

Office of the Assistant Secretary for Public Affairs
Washington, D.C. 20590